Central Illinois Lincoln Logs

National Weather Service, Lincoln IL

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In this issue:

Severe Weather Volunteer Recognition: HAM Radio Operators

By: Chris Miller, Warning Coordination Meteorologist

Any organization can attest to the fact that volunteers are a very important part of operations, and the National Weather Service (NWS) is no different. There are numerous volunteers that assist the NWS with everything from collecting weather data to helping during severe weather operations. One such group is HAM radio.

Rick Kempf (WD9HRU), left, and John Anderson (W9TRC) work the CW desk.

Since 1999, the NWS has held a special 24 hour HAM radio event called SKYWARN Recognition Day (SRD) in appreciation of their efforts in assisting the NWS and local communities during severe weather and other hazardous episodes. During SKYWARN Recognition Day, HAM radio volunteers visit NWS offices and contact other radio operators across the country and around the world.

Front to back, Jarrod Cook (WX9JC), Nick Mishler (KB9YVN), and Craig Held (WX9CAH) make ECHOLINK contacts.

This year, SKYWARN Recognition Day will be held from **6:00 PM CST Friday December 3rd until 6:00 PM CST Saturday December 4th**. Last year, HAMs which participated from the Lincoln, IL NWS Office made 962 contacts, which included all 50 states and 72 other NWS offices.

HAMs can contact us this year on the following bands: 80 meters, 40 meters, 20 meters, 15 meters, 10 meters, 2 meters and 440 MHz. Also, we will be operating the following modes: SSB, CW, FM and Echolink. The Lincoln Weather Amateur Radio Club uses the call sign WX9ILX. If you are HAM anywhere in the country, look for us on December 3rd and 4th!

Front to back, Terry Storer (K9TLS), Steve Craig (WD9CIR), and Deb Craig (N9SJ) work 40 meters and log contacts during SRD 2009.

Ed Shimon: Senior Forecaster, Ironman

What is an Ironman? It is someone who completes an ultra-endurance event consisting of a 2.4-mile swim, a 112-mile bike ride, and a marathon run of 26.2 miles. The race encompasses 140.6 miles. Ed Shimon, a senior forecaster at NWS Lincoln completed just such an event on Sunday September 12, in Madison, Wisconsin. It was Ed's first Ironman race ever, and he finished with a time of 12 hrs 51 mins and 35 seconds. His swim segment was 1 hr 9 min 35 sec, which broke down to a pace of 1 min 50 sec for each 100 meters. His bike segment took him 6 hrs 18 mins 49 sec, averaging 17.7 mph for the 112 miles. Incidentally, that particular bike segment is touted as the second hardest Ironman bike of the 22 Ford Ironman races worldwide, due to the number, steepness and size of the hills on the course. Only St. George, Utah has a harder bike leg. Ed then progressed to the 26.2-mile marathon run, which he finished in 5 hrs and 6 mins and 35 sec, averaging 11:43 per mile. His overall finish time of 12:51:35 was good enough for him to place 1019 out of 2920 racers, and 183 out of 399 in his age group of 40-44 yr old males. Ed felt great just to finish such an amazing race. The icing on the cake came when he realized that he finished ahead of 60% of the rest of the racers.

Ed Shimon on the bike segment near the Wisconsin Capitol building in Madison.

Training for an Ironman triathlon race takes a large time commitment, and usually begins around one year prior to the race. Training hours climb up to between 16-20 hours per week during peak training the last 3 months before the race. Competing in these ultra-endurance events requires sacrifice from the entire family, in both money and time that the person is busy training.

The event was one of only 6 Ford Ironman races held inside the United States each year. There are 22 Ford Ironman races total held world-wide, everyone competing to earn a spot in the World Championships in Kona, Hawaii each fall. While Ed did not qualify for Kona, he says he is just happy to be healthy enough to compete in races of this nature. He thinks he may try the Madison Ironman again in a couple of years. He just needs a little break from the long training hours to help with his new baby son, born on Aug 6, 2010, David Edward.

Ed Shimon's Ironman Statistics:

- Swim segment (2.4 miles): 1 hour, 9 minutes, 35 seconds
- Bike segment (112 miles): 6 hours, 18 minutes, 49 seconds
- Run (26.2 miles): 5 hours, 6 minutes, 35 seconds
- Time of completion for all 3 legs of the race (140.6 miles): 12 hours, 51 minutes, 35 seconds

Average winter weather for selected cities (December through February):

Springfield —

- Normal mean temperature 28.7 degrees
- Normal precipitation 5.96 inches
- Normal snowfall 19.9 inches

Peoria —

- Normal mean temperature 26.2 degrees
- Normal precipitation 5.57 inches
- Normal snowfall 19.6 inches

Urbana —

- Normal mean temperature 27.6 degrees
- Normal precipitation 6.66 inches
- Normal snowfall 20.2 inches

Winter Weather Preparedness Week in Illinois is November 14-20

Winter Outlook

NOAA's Climate Prediction Center has released the winter weather outlook for the nation. A moderate to strong La Niña will be the dominant climate factor influencing weather across most of the U.S. this winter.

La Niña is associated with cooler than normal water temperatures in the Equatorial Pacific Ocean, unlike El Niño which is associated with warmer than normal water temperatures. Both of these climate phenomena, which typically occur every 2-5 years, influence weather patterns throughout the world and often lead to extreme weather events. Last winter's El Niño contributed to record-breaking rain and snowfall leading to severe flooding in some parts of the country, with record heat and drought in other parts of the country. Although La Niña is the opposite of El Niño, it also has the potential to bring weather extremes to parts of the nation.

"La Niña is in place and will strengthen and persist through the winter months, giving us a better understanding of what to expect between December and February," said Mike Halpert, deputy director of the Climate Prediction Center – a division of the National Weather Service. "This is a good time for people to review the outlook and begin preparing for what winter may have in store."

The outlook calls for enhanced chances of a warmer than normal winter for much of the central and southern United States, with trends toward cooler than normal weather for the Pacific coast and the northern Plains. A wetter than normal winter is favored for much of the Ohio Valley and Midwest region, as well as the Pacific Northwest and northern Rockies. Drier than normal conditions are favored across the southern states.

Local 3-month temperature outlooks are available on the following page:

http://www.weather.gov/climate/calendar_outlook.php?wfo=ilx

What a Difference a Year Makes!

October 2009 vs October 2010:

Decatur:
2009 — 10.09”
2010 — 0.51”

Effingham:
2009 — 10.99”
2010 — 0.56”

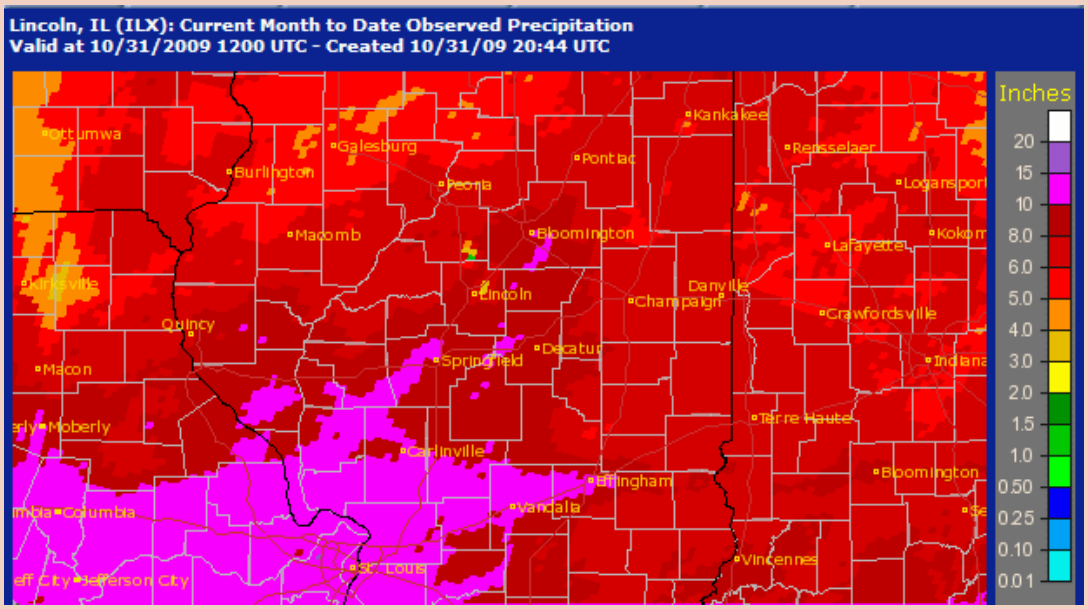
Lincoln:
2009 — 9.86”
2010 — 1.57”

Normal:
2009 — 10.18”
2010 — 1.72”

Peoria:
2009 — 7.95”
2010 — 1.52”

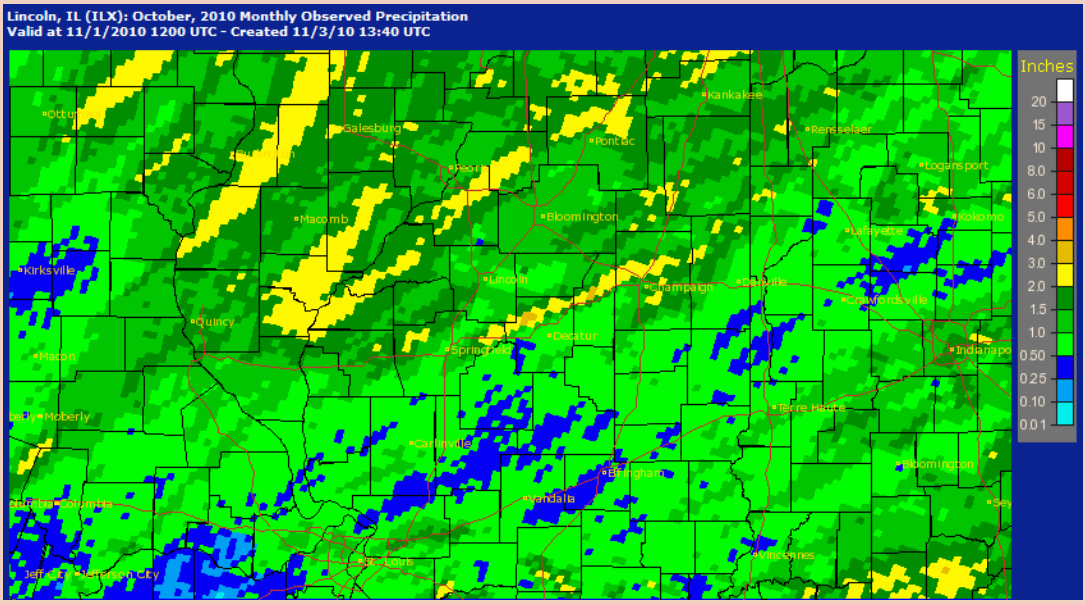
Springfield:
2009 — 11.32”
2010 — 0.99”

Urbana:
2009 — 8.79”
2010 — 1.10”



October 2009 was one of the wettest Octobers on record in the area, but October 2010 was on the opposite end of the spectrum.

In the above image from 2009, amounts in excess of 5 inches (red shades) covered almost all of the region, with totals upwards of 10 inches or more indicated in the purple shades. The image below shows October 2010 totals. Some areas received 2 to 3 inches of rain or more (yellow shades), but most locations had only 1 to 2 inches of rain, with less than an inch south of the I-72 corridor. Precipitation was less than 25% of normal in many areas south of I-72.



On the plus side, the warm and dry weather allowed crop harvesting to proceed at a much quicker pace than last year. At the end of October, 98% of the corn crop was harvested across the state, compared to only 18% at the same time last year.

Weather Trivia updated:

The Illinois Weather Trivia section of our homepage has been updated and reformatted. You can now select a specific day's trivia entries, or show the entire month at once by clicking on the name of the month.

The Weather Trivia is available at the following page:

http://www.weather.gov/lincoln/trivia/trivia.php

Short-Term Weather Lore Holds a Kernel of Truth

By: Jim Angel, Illinois State Climatologist

Before the Internet, The Weather Channel, and NOAA radios, our ancestors relied on nature to tell its tale of upcoming weather. Moss growing on the south side of trees and squirrels hiding their nuts deep underground were thought to foretell a severe winter ahead.

Some natural prognostications like these are grounded in truth, given our current knowledge of meteorology, but others are purely fiction.

Short-term weather forecasts based on nature observations are more likely to be accurate than long-term seasonal predictions. In fact, there may be some merit to the notion that bad weather is coming when cattle lie down in the pasture and birds fly low.

"Many animals have a better sense of hearing and smell than we do, so when humidity, air pressure and wind direction change right before a storm, as well as the distant rumble of thunder, some animals may become restless," Angel said. "They can pick up on weather changes hours before we can."

Predictions based on the appearance of the sky are thought to be particularly valuable, since certain clouds are associated with certain weather conditions, according to Angel. Clouds described as mare's tails and mackerel scales are very high-level cirrus and cirrocumulus clouds that can precede an approaching warm front, with rain not far behind.

Likewise, a halo around the moon is actually the refraction of moonlight through the ice crystals that make up high-level cirrus clouds, indicating an approaching low-pressure system bringing rain or snow.

Long-term forecasts, such as winter weather predictions, are much more uncertain.

"Centuries ago, it was important to determine how severe the winter would be so that adequate wood and supplies would be stored for the duration," Angel said. "The early settlers' lives may have depended on their predictions, so they were grasping at anything to forecast the coming weather. However, the size of the brown band on woolly worms, the groundhog seeing its shadow, or spoon-shaped persimmon seeds are just happenstance."

Even with today's modern technology, the theoretical limit of daily weather forecasts is about two weeks. Within the 6- to 14-day range, forecast errors can be large enough to limit their usefulness.

That is why forecasters typically only discuss general patterns of weather behavior beyond five days, usually in terms of probability or odds. For example, the 8- to 14-day forecast may show the eastern U.S. with an increased chance of below-normal temperatures.

The same is true for seasonal forecasts that are driven by both long-term trends and specific weather patterns such as El Niño.

For the upcoming winter, forecasters look at historical records to decipher a pattern. The Midwest is under the La Niña effect, which is characterized by unusually cold waters in the eastern tropical Pacific Ocean.

The National Weather Service's winter forecast for Illinois is an increased chance for above normal temperatures in the southern two-thirds of Illinois, and equal chances of above, below, and normal temperatures in the northern third of Illinois. All of Illinois has an increased chance of above normal precipitation.

What does the woolly worm predict?

Summer 2010 statistics:

Peoria —

- Average temperature 76.3°F (3.2°F above normal)
- Total rainfall 13.51” (2.49” above normal)

Springfield —

- Average temperature 77.9°F (3.5°F above normal).
- Total rainfall 16.58” (5.87” above normal)

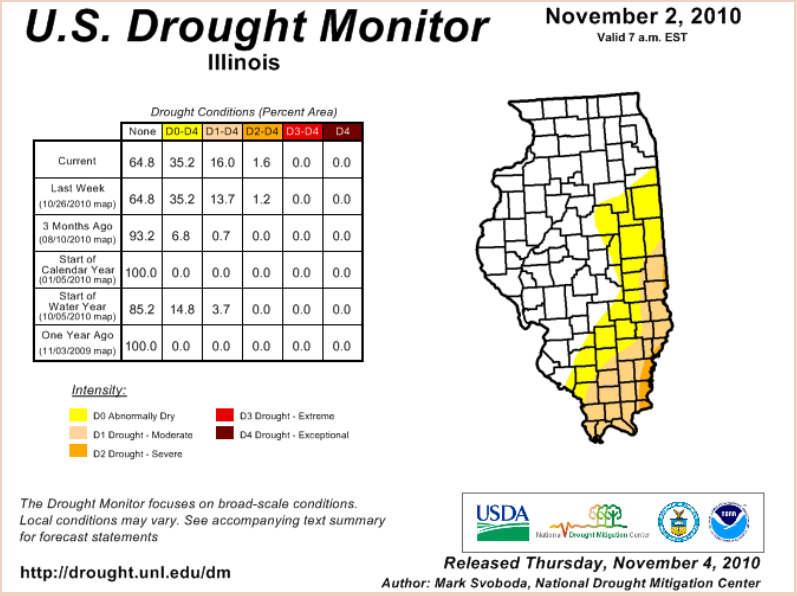
Lincoln —

- Average temperature 75.2°F (2°F above normal).
- Total rainfall 18.29” (5.97” above normal)

Change Your Clocks!

Remember that Daylight Saving Time comes to an end at 2 am Sunday, November 7. Clocks should be set back 1 hour.

Drought Affecting Parts of Illinois



Dry conditions over portions of Illinois the last few months have resulted in drought conditions creeping into parts of the state. As of November 2, 16% of the state was in a moderate drought or worse, primarily across southeast and far southern Illinois. This has affected areas as far north as Lawrenceville (2.79 inches between August 1 and October 31) and Paris (2.43 inches).

The outlook is for improving conditions through the winter.

Lincoln Electronics Technician Retires

Ken Hunter, electronics technician, has decided to call it a career as of October 31. Ken worked for the Federal Government for the last 25 years. He served two tours of duty at ILX, with a period at the NWS office in Amarillo, TX, in between.

Congratulations Ken, and best of luck on your future endeavors!

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www.weather.gov/lincoln

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15 Years of the Lincoln NWS

September 27 marked the 15th anniversary of the full-time operations of the Lincoln National Weather Service office.

Construction began on the Central Illinois Weather Forecast Office (WFO) in December 1993. The office was part of the NWS's Modernization and Associated Restructuring (MAR) project, in which the functions of the Peoria and Springfield NWS offices would merge into a single office, to be located in Lincoln. Construction was completed in the fall of 1994, and the building was accepted by the U.S. government.

In mid February 1995, the first weather balloon launch took place from the Lincoln office. From then until late September, this was the only official function of the office. As a result, it was not open 24 hours a day. As staffing gradually increased that spring and summer, the new employees were trained on the operations of the new Doppler radar.

It was on September 27 of that year that full-time operations of the Lincoln office commenced. Equipment from the Peoria and Springfield offices was moved to Lincoln.

Operations of the NOAA Weather Radio network were transferred to Lincoln, and responsibility for severe weather warning issuances was also transferred to Lincoln. The Peoria and Springfield offices were officially closed on October 1, 1995.

As further training and staffing increases took place in Lincoln, forecast responsibilities were added to the Lincoln NWS office. On April 1, 1996, aviation forecast responsibility for airports in Peoria, Springfield, Decatur, and Champaign was transferred to Lincoln, from the Chicago office. On July 6, 1999, routine public weather forecasts were transferred to Lincoln for its 35 county warning area.

Staffing of the Lincoln NWS currently consists of the following employees:

- **Administrative staff:** Ernest Goetsch (Meteorologist in Charge), Chris Miller (Warning Coordination Meteorologist), Llyle Barker (Science and Operations Officer), Billy Ousley (Data Acquisition Program Manager), Ed Martin (Electronics System Analyst), Darrin Hansing (Service Hydrologist), Tom Raineri (Information Technology Officer), Patty Peifer (Administrative Support Assistant)
- **Senior Meteorologists:** James Auten, Patrick Bak, Brad Churchill, Dan Smith, Ed Shimon
- **General Meteorologists:** Matt Barnes, Chris Geelhart, Kirk Huettl, Heather Stanley
- **Meteorologist Interns:** Amy Jankowski, Dan Kelly, Chuck Schaffer
- **Hydrometeorological Technician:** John Parr
- **Electronics Technician:** Gary Jones

Eight of the above staff have been here the entire 15 years (Ernie, Chris Miller, Billy, Ed Martin, James, Chris Geelhart, John, and Gary).